

10/530163

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C02F5/02 C02F1/20 C02F1/02

R PCT/PTO 04 APR 2005

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 858 248 A (PLESTER GEORGE ET AL) 12 January 1999 (1999-01-12) column 2, line 61-66; figure 1 column 4, line 17-22 column 5, line 21-36 column 6, line 14-18, 36-38	1, 2
Y	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10, 30 November 1995 (1995-11-30) -& JP 07 185521 A (KOYO ISHIKAWA), 25 July 1995 (1995-07-25) abstract -/-	1, 2

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *G* document member of the same patent family

Date of the actual completion of the international search

3 February 2004

Date of mailing of the international search report

26/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Borello, E

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 203 286 A (YOUSSEF MUSTAFA) 20 April 1993 (1993-04-20)	2
Y	figure 2 column 3, line 28-40 column 5, line 23-39	1
A	US 5 190 668 A (CHUANG KARL T) 2 March 1993 (1993-03-02) figure 2; example 1	1,22

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5858248	A	12-01-1999	AU 5662696 A WO 9630309 A1 US 6451211 B1 ZA 9602491 A	16-10-1996 03-10-1996 17-09-2002 03-09-1996
JP 07185521	A	25-07-1995	NONE	
US 5203286	A	20-04-1993	CH 682982 A5 DE 59101262 D1 EP 0461515 A1	31-12-1993 05-05-1994 18-12-1991
US 5190668	A	02-03-1993	AU 2581192 A CA 2120364 A1 WO 9307093 A1	03-05-1993 15-04-1993 15-04-1993